

File 5: Biosis Previews(R) 1969-2002/Jan W1  
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(c) 2001 Cambridge Sci Abs

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File 117: Water Resour. Abs. 1967-2001/Nov  
(c) 2001 Cambridge Scientific Abs.

File 143: Biol. & Agric. Index 1983-2001/Nov  
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File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info

File 248: PIRA 1975-2002Jan W2  
(c) 2002 Pira International

Set	Items	Description
S1	49	THERMAL(3N) SENSITIVE?(3N) (FIBER? OR FIBRE?)
S2	1	FIBRE(3N) NETH OR (FIBRE OR FIBRE) () NETH() BLOCK OR FIBRE-NE-TH
S3	0	HOLLAND() (POTGROUND OR POTGROND) OR POTGRONDVERWERKING OR - (EURO() SUBSTRATES)
S4	7359	(PLANT OR PLANTS) (5N) SUBSTRATE?
S5	44	TREE(3N) SEEDLING?(3N) (PLUG OR PLUGS) OR SEEDLING() (PLUG OR PLUGS)
S6	32388	COCONUT?
S7	27938	SYNTHETIC(3N) (FIBRE? OR FIBER?)
S8	3194	COLD() WATER AND (HOT OR WARM) () WATER
S9	0	S1 AND (S4 OR S5)
S10	0	S1 AND (S6 OR S7 OR S8)
S11	0	S1 AND (PLANT OR PLANTS OR TREE OR SEED OR SEEDLING OR COC-O? OR FLOWER?)
S12	0	S4 AND S5
S13	1	S5 AND S6
S14	1	S13 NOT S2
S15	24	S4 AND S6
S16	0	S15 AND (S7 OR S8)
S17	7	S15/TI

S18	7	S17 NOT (S2 OR S13)
S19	0	S15 AND THERMAL
S20	0	AU="PELTON NR"
S21	0	AU="PELTON NORMAN"
S22	2	AU="PELTON, N. R." OR AU="PELTON, N.R."
S23	1	RD (unique items)
S24	22	S6 AND S7
S25	2	S24/TI
S26	2	RD (unique items)
S27	2	S26 NOT (S2 OR S13 OR S17)
S28	0	S24 AND (S1 OR S4)

2/3,AB/1 (Item 1 from file: 50)  
DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03827144 CAB Accession Number: 20000305960

**Substrate research for roses: evaluation of different types of coir.**

Original Title: Substraatonderzoek bij roos: evaluatie van  
verschillende kokossubstraten.

Blindeman, L.

Conference Title: Special issue: cut flowers.

Verbondsnieuws vol. 43 (20): p.29-31

Publication Year: 1999 --

Language: Dutch

Document Type: Journal article

A greenhouse study was carried out in Belgium to investigate the effects of 6 types of coir on the growth and quality of Rosa hybrida cv. Golden Gate (planted in January 1998 at 6 plants/m<sup>2</sup>). Treatments were cocos peat in buckets (7.5 litres/plant), small and large blocks of **Fibre Neth** (a mixture of cocos peat and artificial fibres; 5 and 6 litres/plant, respectively), cocos peat in bags (4.2 litres/plant), and medium-sized, small-sized and fine coir chips in bags (4.2 litres/plant). The highest levels of entrapped air (>50%) were found in coir chips, while the lowest were found in cocos peat (<20%). This was reversed for the levels of entrapped water (<40% and >70%, respectively). Small- and medium-sized coir chips showed the lowest level of easily available water. No significant differences in number of stems/m<sup>2</sup>, stem weight, and stem length were found between substrates. The highest and lowest flower production (non-significant) were obtained for small-sized and fine coir chips, respectively.

14/9/1 (Item 1 from file: 34)  
DIALOG(R) File 34:SciSearch(R) Cited Ref Sci  
(c) 2002 Inst for Sci Info. All rts. reserv.

09983840 Genuine Article#: 471MY Number of References: 21

**Title: Development of the press extraction method for plug substrate analysis: Quantitative relationships between solution extraction techniques**

Author(s): Scoggins HL (REPRINT) ; Bailey DA; Nelson PV

Corporate Source: Virginia Tech, Dept Hort, 301C

Saunders/Blacksburg//VA/24061 (REPRINT); N Carolina State Univ, Dept Hort Sci, Raleigh//NC/27695

Journal: HORTSCIENCE, 2001, V36, N5 (AUG), P918-921

ISSN: 0018-5345 Publication date: 20010800

Publisher: AMER SOC HORTICULTURAL SCIENCE, 113 S WEST ST, STE 200, ALEXANDRIA, VA 22314-2851 USA

Language: English Document Type: ARTICLE

Geographic Location: USA

Journal Subject Category: HORTICULTURE

**Abstract:** Substrate electrical conductivity (EC), pH, and nutrient content should be monitored frequently during **seedling plug** production. Current testing methods are either complicated, unsuited to plug production, or interpretation standards do not exist. This study compares the press extraction (PE) method developed at North Carolina State Univ. with the saturated media extract (SME) method and the 1 substrate : 2 water suspension method (1:2). These solution extraction methods were applied to plug trays containing peat-based germination mix treated with four levels of fertilizer. Two sample sizes of 20 or 60 plug cells were used to determine if the smaller, less destructive sample size would produce satisfactory results: Resulting pH values varied within 0.3 units among methods, but variability in EC and nutrient content was greater. The PE method resulted in the highest values for EC, NH4+-N, NO3--N, K, Ca, and Mg while sample size had little effect on analyses. The three extraction methods were then compared on peat- and coin-based substrates. Within substrates, pH, EC, and nutrients tested were similar for the PE and the SME. The coir extract had a higher pH and much higher levels of K and Na than did the peat extract but was lower in N, P, Ca, and Mg. Overall, fairly strong correlations among testing methods were found, especially between the SME and PE.

**Descriptors--Author Keywords:** saturated media extract ; SME ; soilless media ; soil testing ; plug nutrition ; coir

**Identifiers--KeyWord Plus(R):** COCONUT COIR DUST; POUR-THROUGH; POTTING MEDIA; GROWTH; PH

**Cited References:**

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EVANS MR, 1996, V32, P965, HORTSCIENCE  
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FONTENO WC, 1996, P93, WATER MEDIA NUTR GRE  
FONTENO WC, 1995, V59, P22, GROWERTALKS  
FONTENO WC, 1995, V59, P24, GROWERTALKS  
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18/3,AB/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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12683945 BIOSIS NO.: 200000437447

**Characterization of the physico-chemical properties of and plant response to ecologically sound organic substrates in relation to rockwool.**

AUTHOR: Islam Md Shahidul(a); Ito Tadashi(a)

AUTHOR ADDRESS: (a)Department of Vegetable Sciences, Faculty of Horticulture, 648, Matsudo, Chiba, 271-8510\*\*Japan

JOURNAL: Hortscience 35 (3):p435 June, 2000

MEDIUM: print

CONFERENCE/MEETING: 97th Annual International Conference of the American Society for Horticultural Science Lake Buena Vista, Florida, USA July 23-26, 2000

SPONSOR: American Society for Horticultural Science

ISSN: 0018-5345

RECORD TYPE: Citation

LANGUAGE: English

SUMMARY LANGUAGE: English

2000

18/3,AB/2 (Item 1 from file: 50)  
DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03961485 CAB Accession Number: 20000316011

**Growth and flower production of rose plants cultivated in coconut fibre or in sands with different particle size.**

Original Title: Crescita e produzione di rosa su fibra di cocco e su sabbie a diverse granulometrie.

Allera, C.; Castello, S.; Farina, E.

Istituto Sperimentale per la Floricoltura, Sanremo, Italy.

Culture Protette vol. 29 (9): p.95-99

Publication Year: 2000

ISSN: 0390-0444 --

Language: Italian Summary Language: english

Document Type: Journal article

Rose cv. Anna plants propagated by rooting or by grafting on Rosa indica (R. chinensis) rootstock and cv. Susan propagated by grafting on Rosa canina rootstock were grown in 30-cm pots containing coconut fibre or sands of different particle size (1.75-2 mm; 1.25-1.5 mm; <0.75 mm). The plants were fed with a complete nutrient solution with EC of 2.1 mS/cm (1.4 mS/cm) from June 15 to September 15 and with a high leaching fraction. The minimum content of water in the substrates during the day throughout the trial was 7% v/v. Coconut fibre induced the highest yield and the highest quality of the harvested flowers for stem length and stem weight. In this substrate the own-rooted plants also gave good results. Regarding the different sands, the best results were observed in the substrate with particle size <0.75 mm. For cv. Anna the presence of the rootstock increased the yield and the quality of the flowers in the sands with particle size >0.75 mm. 5 ref.

18/3,AB/3 (Item 2 from file: 50)  
DIALOG(R)File 50:CAB Abstracts  
(c) 2001 CAB International. All rts. reserv.

03868387 CAB Accession Number: 20002401635

**Continuous measurement of substrate electrical conductivity in container grown plants .**

Eymar, E.; Lieth, J. H.; Oki, L. R.

Departamento de Quimica Agricola, C-VII. Facultad de Ciencias,  
Universidad Autonoma de Madrid, 28049 Madrid, Spain.

Conference Title: Proceedings of the Third International Workshop on  
Models for Plant Growth and Control of the Shoot and Root Environments in  
Greenhouses, Bet Dagan, Israel, 21-25 February, 1999.

Acta Horticulturae (No. 507): p.69-75

Publication Year: 1999

ISSN: 0567-7572

Editors: Bar-Yosef, B.; Seginer, I. --

Language: English

Document Type: Journal article

Saturated paste extraction is the most common method used today to determine soil electrical conductivity (EC). This results in a measurement that is not only an estimation of actual conditions, but it is limited to a single point in time. An EC probe was developed by combining an EC sensor and the ceramic cup of a tensiometer. The probe is able to monitor soil EC non-destructively, continuously, and in nearly real-time. The EC probe and a tensiometer are installed in a container with a rose plant in coconut coir which is initially saturated with nutrient solution. Over a period of 5 days, tension increases rapidly during the day and very little during the night. EC changes very little at night, but in the early morning it decreases before increasing during the remainder of the day. This demonstrates that when the probe is installed with a tensiometer in a container with a plant, the data collected can show the effects of plant water and nutrient uptake on soil moisture and EC. This information can lead to further understanding of nutrient and water uptake and the effects of substrate salinity on plant growth. 14 ref.

**18/3,AB/4 (Item 3 from file: 50)**

DIALOG(R) File 50:CAB Abstracts

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03501693 CAB Accession Number: 980303332

**Water studies on substrates of plant origin for cultivation of epiphytic orchids.**

Original Title: Estudos hidricos com substratos vegetais para cultivo de orquideas epifitas.

Dematte, J. B. I.; Dematte, M. E. S. P.

Departamento de Ciencias Exatas, Universidade Estadual Paulista,  
14870-000 Jaboticabal, SP, Brazil.

Pesquisa Agropecuaria Brasileira vol. 31 (11): p.803-813

Publication Year: 1996

ISSN: 0100-204X --

Language: Portuguese Summary Language: english

Document Type: Journal article

The suitability of various media for cultivation of epiphytic orchids was compared in 3-year trials (1988-91). The media consisted of tree fern fibre, pressed coconut bark, Eucalyptus grandis bark and charcoal alone and/or in combination. The media were stored in the laboratory or exposed to conditions of orchid cultivation under laths in 50% shade with irrigation at 3-day intervals. Adsorption was generally lower in substrates stored in the laboratory. Of these, tree fern fibre retained most water and, although initial retention by pressed coconut bark was low, capacity for adsorption increased significantly when exposed to conditions of orchid cultivation. The best substitute for tree fern fibre was considered to be pressed coconut bark alone or mixed with charcoal (70% pressed coconut bark, 30% charcoal) or E. grandis bark (50% each). 8 ref.

**18/3,AB/5 (Item 4 from file: 50)**

DIALOG(R) File 50:CAB Abstracts

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03037481 CAB Accession Number: 950609168

**Evaluation of substrates from the production of plants in forest nurseries.**

Original Title: Evaluacion de sustratos para la produccion de plantulas en viveros forestales.

Betances, M.; Morrobel, J.

Boletin FDA vol. 7 (1): p.6-7

Publication Year: 1994

Publisher: Fundacion de Desarrollo Agropecuario (FDA) -- Santo Domingo

, Dominican Republic

Language: Spanish

Document Type: Journal article

Comparisons were made in the Dominican Republic of 24 different substrates for the production of nursery plants of *Pinus caribaea*, *Leucaena leucocephala*, *Catalpa longissima*, *Azadirachta indica* and *Acacia mangium*. The substrates consisted of various proportions of rice-husks/peat, coconut fibre/peat, and sugarcane waste/peat. The best plant growth was obtained with the mixtures of rice husks and peat, followed by 30% coconut fibre + 70% peat.

18/3,AB/6 (Item 1 from file: 144)

DIALOG(R) File 144:Pascal

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14211131 PASCAL No.: 99-0411703

**Lysophosphatidic acid acyltransferase from coconut endosperm mediates the insertion of laurate at the sn-2 position of triacylglycerols in lauric rapeseed oil and can increase total laurate levels**

KNUTZON D S; HAYES T R; WYRICK A; HUI XIONG; DAVIES H M; VOELKER T A

Calgene, 1920 Fifth Street, Davis, California 95616, United States

Journal: Plant physiology : (Bethesda), 1999, 120 (3) 739-746

Language: English

Expression of a California bay laurel (*Umbellularia californica*) 12:0-acyl-carrier protein thioesterase, bay thioesterase (BTE), in developing seeds of oilseed rape (*Brassica napus*) led to the production of oils containing up to 50% laurate. In these BTE oils, laurate is found almost exclusively at the sn-1 and sn-3 positions of the triacylglycerols (T.A. Voelker, T.R. Hayes, A.C. Cranmer, H.M. Davies (1996) Plant J 9: 229-241). Coexpression of a coconut (*Cocos nucifera*) 12:0-coenzyme A-preferring lysophosphatidic acid acyltransferase (D.S. Knutzon, K.D. Lardizabal, J.S. Nelsen, J.L. Bleibaum, H.M. Davies, J.G. Metz (1995) Plant Physiol 109: 999-1006) in BTE oilseed rape seeds facilitates efficient laurate deposition at the sn-2 position, resulting in the accumulation of trilaurin. The introduction of the coconut protein into BTE oilseed rape lines with laurate above 50 mol % further increases total laurate levels.

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18/3,AB/7 (Item 1 from file: 266)

DIALOG(R) File 266:FEDRIP

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00265621

IDENTIFYING NO.: 0169528 AGENCY CODE: AGRIC

**DEVELOPMENT OF COCONUT COIR PRODUCTS AS HORTICULTURAL**

soil physics

ASSOCIATE INVESTIGATORS: Evans, M. R.; Whipker, B. E.

PERFORMING ORG.: IOWA STATE UNIVERSITY, HORTICULTURE, AMES, IOWA 50011

SUMMARY: A. Determine the physical and chemical properties of coir products. B. Determinethe properties of coir as a substrate component. C.



Develop and evaluate coir-based substrates in production trials. The physical and chemical properties of coir will be determined as a function of the origin of the coir, the degree of grinding used in processing and the moisture and pressure levels used in compressing blocks for shipping. Based upon these results, a course-grade and fine-grade of coir suitable for horticultural markets will be identified and used in further studies. Both course and fine-grade coir will be combined with other commonly used substrate components and the physical properties

determined and compared with peat. Physical properties will also be determined for these coir and peat-based substrates when placed in production containers since both the container and the substrate affect the physical properties. The physical and chemical properties will also be determined over time to determine how they change as the coir ages (i.e. during production). Substrates will be developed using course and fine-grade coir as well as peat. Numerous horticulturally important crop species will be produced, under different production regimes, using the substrates. The substrates will be evaluated based upon plant performance. PR 80:0:20 or 0:80:20 coconut coir dust (coir):Sphagnum

peat (peat):perlite (v/v) amended with dolomitic limestone to a pH of 5.5. Substrates were inoculated with *Phytophthora sojae* races 5 and 25 isolated from soybean and grown in dilute liquid V-8 cultures. Uninoculated controls were included. Containers were watered daily to maintain moisture levels at or near container capacity. The experiment was repeated twice. Plants grown in peat-based root substrates inoculated with *P. sojae* suffered 50% to 100% mortality. No plants in coir-based root substrates displayed visually apparent infection symptoms. *Catharanthus rosea* (vinca) seedlings were transplanted into substrates composed of 80:0:20 and 0:80:20 which had been inoculated

with 0, 5,000 or 50,000 oospores of *Pythium irregulare* per container. Vinca grown in the inoculated coir had no visually apparent disease symptoms, while the vinca grown in the inoculated peat had extensive disease symptoms. Soybean seed were also sown in root substrates that contained 0:80:20, 20:60:20, 40:40:20, 60:40:20 or 80:0:20 coir:peat:perlite (v/v). Inoculum of *P. sojae* races 1, 5 and 25 grown on water agar and diluted in deionized water. Solution containing 20,000 colony-forming units (oospores) was mixed into the root substrate of each container. Uninoculated controls were included. As the proportion of coir in the substrate increased, the mortality, the

number of plants displaying disease symptoms and the severity of disease symptoms decreased. Plants grown in substrates containing at least 60% coir displayed no visually evident disease symptoms. Pasteurization was shown to increase the ability of coir to suppress disease development caused by these pathogens. PB husk and processing effects on chemical and physical properties of coconut coir dust. HortScience 34(1):88-90 PB marginata and *Spathiphyllum* 'Petite' in Sphagnum peat and coconut coir dust-based growing media. J. Env. Hort. 17(1):49-52.

22/9/1 (Item 1 from file: 10)  
DIALOG(R) File 10:AGRICOLA  
(c) format only 2001 The Dialog Corporation. All rts. reserv.

1738067 80093385 Holding Library: AGL

**The "Pelton mudpack": an alternate form of planting**

**Pelton, N.R.**

Symposium on Root Form of Planted Trees Victoria, Canada 1978  
Victoria, , The Service.

Joint report - British Columbia Ministry of Forests, Canadian Forestry  
Service. 210 0 Jt Rep B C Minist For Can For Serv 1978. (8) , 1978.  
p. 253-256. ill.

NAL: SD14.C26B73

Language: ENGLISH

Subfile: OTHER USDA;

Document Type: ARTICLE

Section Headings: K120 FORESTRY PRODUCTION-ARTIFICIAL REGENERATION

22/9/2 (Item 1 from file: 50)  
DIALOG(R) File 50:CAB Abstracts  
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00866047 CAB Accession Number: 790656740

**The 'Pelton mudpack': an alternate form of planting.**

**Pelton, N. R.**

Pelton Reforestation Ltd., Maple Ridge, BC, Canada.

Conference Title: Root form of planted trees. Session D: Douglas-fir  
region.

p.253-256

Publication Year: 1978

3 pl.

Editors: Proceedings of the root form of planted trees symposium, held  
in Victoria, British Columbia, May 16-19, 1978.: Eerden, E. van; Kinghorn,  
J. M.

Publisher: British Columbia Ministry of Forests & Canadian Forest  
Service. -- Victoria, British Columbia, Canada

Language: English

Document Type: Miscellaneous

Lodgepole pine 'mudpacked' planting stock (roots packed in a peat  
mixture) exhibited less root deformation than either bare-root stock or  
container-grown plugs. The mudpacked stock showed heavy lateral root  
development similar to that of naturally regenerated seedlings. It is  
suggested that growing of the stock in a controlled environment would  
provide even better results.

DESCRIPTORS: planting stock; roots; growth; deformation; container grown  
plants; nurseries; conifers

IDENTIFIERS: growth and development; bare-rooted; use of containers

ORGANISM DESCRIPTORS: Pinus contorta

BROADER TERMS: Pinus; Pinaceae; Coniferae; gymnosperms; Spermatophyta;  
plants

CABICODES: Forestry (General) (KK100); Plant Morphology & Structure  
(FF030); Plant Production (FF100); Silviculture (KK110); Plant  
Propagation (FF160)

27/3,AB/1 (Item 1 from file: 203)  
DIALOG(R) File 203:AGRIS  
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01281794 AGRIS No: 88-055379

**Cuprammonium rayon from coconut trunk dissolving pulp [Philippines]**  
Francia, P.C.; Eleazar, A.C.; Serrano, A.C. (Forest Products Research  
and Development Inst., College, Laguna (Philippines))  
Journal: FPRDI Journal, Apr-Jun 1984, v. 13(2) p. 42-53  
Language: English Summary Language: English

Cuprammonium dissolving pulp was produced from coconut trunk chips by the prehydrolysis-kraft process and purified by multi-stage bleaching sequence. The unbleached kraft pulp obtained had a relatively low pulp yield and the pulp purification by the 3-stage C-E-H and 5-stage C-E-H-E-H bleaching sequence produced to cuprammonium grade dissolving pulp with physical and chemical properties within standard specification. Cuprammonium rayon was spun using a pneumatic wet-spinning machine. The rayon spun from a higher concentration of cellulose and alpha cellulose content and purified with a 3-stage bleaching sequence of CEH, was comparable to standard commercial grade rayon. The physical and chemical properties of the rayon had a tensile strength range from 4.05-4.3 g per tex, stretch rupture of 5.2-6.4% shrinkage in length of 1.10% yarn number, 130 gms/tex. The yarn considered to be a dyeable fiber readily stained with the dye stuff used. The microscopic longitudinal view appeared cylindrical in shape without striation, while the cross sectional view was quite smooth and round. The cupra rayon was readily soluble in acids but insoluble to alkalis.

27/3,AB/2 (Item 1 from file: 248)  
DIALOG(R) File 248:PIRA  
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00389842 Pira Acc. Num.: 20013185

**Title: GEOTEXTILES FROM COCONUT FIBRES**  
Authors: Unger J  
Source: Tech. Text. vol. 37, no. 2, May 1994, pp T55-T58  
ISSN: 0323-3243  
Publication Year: 1994  
Document Type: Journal Article  
Language: German

**Abstract:** The development of applications for coconut fibre in geotextiles could be a big boost to the export of coir from developing countries. India already has an organised coir industry, but other countries have yet to exploit theraw material. The properties of the coir fibre are discussed. High rot resistance is evident. Harvesting at different ages should be taken into account. The treatment of coconut fibres is described. The combination of strength with a certain amount of stretchability is good in geotextile applications. Possible uses of the fibres, such as sand catching mats, drainage pipes, erosion prevention, canal protection and filter layers, are discussed. Combinations with synthetic fibres can produce enhanced properties. (9 fig, 2 tab, 18 ref)

File 344:CHINESE PATENTS ABS APR 1985-2001/Oct  
(c) 2001 EUROPEAN PATENT OFFICE  
File 347:JAPIO OCT 1976-2001/Aug(UPDATED 011203)  
(c) 2001 JPO & JAPIO  
File 350:Derwent WPIX 1963-2001/UD,UM &UP=200202  
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File 371:French Patents 1961-2001/BOPI 200151  
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Set	Items	Description
S1	5	THERMAL(3N) SENSITIVE?(3N) (FIBER? OR FIBRE?)
S2	0	FIBRE(3N) NETH OR (FIBRE OR FIBRE) () NETH() BLOCK OR FIBRE-NE-TH
S3	0	HOLLAND() (POTGROUND OR POTGROND) OR POTGRONDVERWERKING OR - (EURO() SUBSTRATES)
S4	835	(PLANT OR PLANTS) (5N) SUBSTRATE?
S5	10	TREE(3N) SEEDLING?(3N) (PLUG OR PLUGS) OR SEEDLING() (PLUG OR PLUGS)
S6	6093	COCONUT?
S7	39788	SYNTHETIC(3N) (FIBRE? OR FIBER?)
S8	7502	COLD() WATER AND (HOT OR WARM) () WATER
S9	0	S1 AND (S4 OR S5 OR S6 OR S7 OR S8)
S10	2	S1/TI
S11	0	S1 AND (PLANT OR PLANTS OR TREE OR SEED OR SEEDLING OR CULTIVATION)
S12	0	S4 AND S5
S13	88	S6 AND S7
S14	1	S13 AND (S4 OR S5)
S15	1	S14 NOT S10
S16	0	S13 AND S8
S17	0	S5 AND S6
S18	13	S4 AND S6
S19	1	S18 AND S7
S20	0	S19 NOT (S10 OR S14)
S21	7	S18/TI
S22	7	S21 NOT (S10 OR S14)
S23	0	S5 AND S7
S24	0	S5 AND (FIBRE? OR FIBER?)
S25	0	S5 AND S8
S26	1	PA="VAN DER KNAAP N G H" OR PA="VAN DER KNAAP N G H (VKNA--I)" OR PA="VAN DER KNAAP N G H M" OR PA="VAN DER KNAAP N G H M (VKNA-I)"
S27	0	S26 AND (S1 OR S4 OR S5 OR S6 OR S7)
S28	1	AU="PELTON N R"
S29	1	S28 NOT (S10 OR S14 OR S21 OR S26)

10/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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014124270  
WPI Acc No: 2001-608480/200170  
XRAM Acc No: C01-180984  
XRPX Acc No: N01-454343

**Temperature indicating sash paper for home, includes a fiber colored by thermal sensitive pigment**

Patent Assignee: NIPPON KAMI PULP SHOJI KK (NIKA-N)  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001040599	A	20010213	JP 99213608	A	19990728	200170 B

Priority Applications (No Type Date): JP 99213608 A 19990728

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001040599	A		6	D21H-021/28	

Abstract (Basic): JP 2001040599 A

NOVELTY - A temperature indicating sash paper includes a fiber colored by thermal sensitive pigment.

USE - For monitoring temperature in home.

ADVANTAGE - The sash paper is sensitive to change in temperature.

The sash paper is inexpensive and is colored uniformly.

pp; 6 DwgNo 0/0

Title Terms: TEMPERATURE; INDICATE; SASH; PAPER; HOME; THERMAL; SENSITIVE; PIGMENT

Derwent Class: F09; G05; Q48; S03

International Patent Class (Main): D21H-021/28

International Patent Class (Additional): D21H-011/20; E06B-003/70;

G01K-011/16

File Segment: CPI; EPI; EngPI

10/5/2 (Item 2 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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007820500 \*\*Image available\*\*  
WPI Acc No: 1989-085612/198911  
XRPX Acc No: N89-065319

**Fibre -optic thermal switch with temp. sensitive snap-acting device  
- has device disposed between adjacent fibre ends, interrupting light path in between at predetermined temperature**

Patent Assignee: SUNDSTRAND DATA CONTROL (SUNH )

Inventor: SCOTT B G; STEINKE K O

Number of Countries: 011 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8902064	A	19890309	WO 88US2733	A	19880808	198911 B

Priority Applications (No Type Date): US 8793338 A 19870904

Cited Patents: US 3796393; US 3898454; US 4464936; US 4521683; US 4543961;  
US 4588886; US 4611600

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 8902064	A	E	24		

Designated States (National): JP

Designated States (Regional): AT BE CH DE FR GB IT LU NL SE

Abstract (Basic): WO 8902064 A

A fibre optic thermal switch includes a thermally sensitive snap-acting bimetal member (10') which changes from a convex to a concave configuration at a predetermined temperature. A pair of optical fibres (S,D) are arranged such that the bimetal member reflects light emitted from one fibre into the end of the other when in one configuration, but not in the other.

Alternatively, the bimetal may be opaque but apertural, to transmit light therethrough when in one configuration, or may include a filter suppressing a given wavelength when moved into the light path.

USE/ADVANTAGE - For detecting overheating, e.g. in battery, pump motor, electronic appts. etc. Arrangement is of reduced size and weight, and is not subject to electromagnetic interference.

Title Terms: FIBRE-OPTIC; THERMAL; SWITCH; TEMPERATURE; SENSITIVE; SNAP; ACT; DEVICE; DEVICE; DISPOSABLE; ADJACENT; FIBRE; END; INTERRUPT; LIGHT; PATH; PREDETERMINED; TEMPERATURE

Index Terms/Additional Words: BATTERY; PUMP; MOTOR; ELECTRONIC; APPARATUS; COOLING

Derwent Class: S02; V04; V07; X13; X16; X25

International Patent Class (Additional): G01D-005/30

File Segment: EPI

15/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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012423252 \*\*Image available\*\*  
WPI Acc No: 1999-229360/199919  
XRAM Acc No: C99-067472  
XRPX Acc No: N99-169732

**Vegetation strip has a plant germination or propagation mat**

Patent Assignee: BEHRENS W (BEHR-I)  
Inventor: BEHRENS W  
Number of Countries: 023 Number of Patents: 006  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9913703	A1	19990325	WO 98DE2638	A	19980903	199919 B
DE 19740682	A1	19990401	DE 1040682	A	19970916	199919
EP 939585	A1	19990908	EP 98954137	A	19980903	199941
			WO 98DE2638	A	19980903	
DE 19740682	C2	19991104	DE 1040682	A	19970916	199950
JP 2001505065	W	20010417	WO 98DE2638	A	19980903	200128
			JP 99517287	A	19980903	
US 6250010	B1	20010626	WO 98DE2638	A	19980903	200138
			US 99297599	A	19990504	

Priority Applications (No Type Date): DE 1040682 A 19970916

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9913703	A1	G	19	A01G-001/00	
				Designated States (National): IL JP PL US	
				Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE	
DE 19740682	A1			A01G-007/00	
EP 939585	A1	G		A01G-001/00	Based on patent WO 9913703
				Designated States (Regional): AT BE CH DK FR GB IT LI NL SE	
DE 19740682	C2			A01G-007/00	
JP 2001505065	W		13	A01G-001/00	Based on patent WO 9913703
US 6250010	B1			A01C-001/04	Based on patent WO 9913703

Abstract (Basic): WO 9913703 A1

NOVELTY - A vegetation strip has a structural mat placed in an offset position on a base so that the mats and bases of adjacent vegetation strips overlap.

DETAILED DESCRIPTION - A vegetation strip (10) has a structural mat (12) which can be filled with a **substrate** and with germinating **plant** matter, especially seeds, shoots, spores or shoot sections, the mat (12) being placed on a base (14) with one mat side edge region projecting over a base side edge and the opposite base side edge region projecting below the opposite mat side edge, such that the mats and bases of adjacent vegetation strips (10) overlap.

An INDEPENDENT CLAIM is also included for a similar vegetation strip in which the underside (26) of the structural mat (12) is bonded to a nonwoven material (28) which is placed on the base (14). Preferred Features: The base (14) is a mat of renewable raw material (e.g. **coconut** fibers), mineral wool or textile fibers or is a nonwoven material of **synthetic fibres**.

USE - As a vegetation strip especially for application to a roof.

ADVANTAGE - The design provides simple compensation or prevention of shrinkage under dry conditions to prevent wind access to the strip underside and/or erosion of the substrate material.

DESCRIPTION OF DRAWING(S) - The drawing shows a cross-sectional view of a vegetation strip according to the invention.

Vegetation strip (10)

Structural mat (12)

Base (14)  
Mat underside (26)  
Nonwoven material backing (28)  
pp; 19 DwgNo 2/3

Title Terms: VEGETATION; STRIP; PLANT; GERMINATE; PROPAGATE; MAT  
Derwent Class: A23; A97; P11; P13; Q45  
International Patent Class (Main): A01C-001/04; A01G-001/00; A01G-007/00  
International Patent Class (Additional): E04D-011/00  
File Segment: CPI; EngPI



22/5/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013687033 \*\*Image available\*\*  
WPI Acc No: 2001-171257/200118  
XRAM Acc No: C01-051384  
XRPX Acc No: N01-123726

**Soil-less substrate block for raising horticultural plants made from compacted organic fibres with drainage channel inside waterproof sleeve**

Patent Assignee: LE COMPTOIR ROUSSILLONNAIS SARL (ROUS-N)

Inventor: VILA F

Number of Countries: 025 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1082894	A1	20010314	EP 2000440238	A	20000901	200118 B
FR 2798038	A1	20010309	FR 9911106	A	19990902	200118

Priority Applications (No Type Date): FR 9911106 A 19990902

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 1082894	A1	F	9	A01G-031/00	
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI

FR 2798038	A1			A01G-031/00	
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Abstract (Basic): EP 1082894 A1

NOVELTY - The substrate block (1) is made from a mixture of organic fibres of various lengths, such as peat or coconut fibres, compacted and enclosed in a waterproof plastic sleeve. The block is made up of up to 95 per cent of long fibres (4 - 5 cm) and at least 5 per cent of short fibres (0.5 - 4 cm). The base of the block has at least one lengthwise or transverse drainage channel (3), moulding during the compacting operation and measuring 2.5 - 3 cm wide and 5 - 6 cm high once the block has expanded after soaking. The plastic sleeve is made from two coextruded layers, black on the inside and white on the outside; it has pre-cut holes (9) in the top, covered by removable patches (6) or an adhesive strip, to receive plant root blocks (4).

USE - Soil-less plant growing medium e.g. for market gardening.

ADVANTAGE - Improved plant root aeration and nutrient solution drainage.

DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of the block contained in a plastic sleeve.

Fibre block (1)

Plastic sleeve (2)

Drainage channel (3)

Plant root block (4)

Covering patch (6)

Elastic retaining bands (7)

Hole (9)

pp; 9 DwgNo 1/2

Title Terms: SOIL; LESS; SUBSTRATE; BLOCK; RAISE; HORTICULTURAL; PLANT; MADE; COMPACT; ORGANIC; FIBRE; DRAIN; CHANNEL; WATERPROOF; SLEEVE

Derwent Class: A92; P13

International Patent Class (Main): A01G-031/00

International Patent Class (Additional): A01G-009/00

File Segment: CPI; EngPI

22/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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012869183

WPI Acc No: 2000-041016/200004

XRAM Acc No: C00-010839

**New substrate for growing young plants**

Patent Assignee: HOUTEPEN P W (HOUT-I)

Inventor: HOUTEPEN P W

Number of Countries: 025 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 962129	A1	19991208	EP 98201859	A	19980605	200004 B

Priority Applications (No Type Date): EP 98201859 A 19980605

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 962129	A1	E 7	A01G-031/00	

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): EP 962129 A1

NOVELTY - Solid substrate composition comprising a polymeric foam, consists of a mixture of: (i) polymeric foam in a divided state (80-40 wt.%); and (ii) a second material (20-60 wt.%) selected from organic materials and/or mineral wool, also in a divided state.

USE - The solid substrate composition is used in substrate blocks and substrate mats (claimed). The composition can be used for growing young plants and growing fruits on fully grown plants.

ADVANTAGE - The presence of the polymeric foam enables plants to develop roots between and around the foam particles and the organic material and/or mineral wool, but also enables it to develop an active root system in the pores of the polymeric foam with an increased number of active, smaller hair roots which are capable of absorbing nutriment rapidly. The composition has good absorbent properties and is capable of performing a humidity control function with respect to the plant.

pp; 7 DwgNo 0/1

Title Terms: NEW; SUBSTRATE; GROW; YOUNG; PLANT

Derwent Class: A17; A25; A97; C07

International Patent Class (Main): A01G-031/00

International Patent Class (Additional): C08J-009/33

File Segment: CPI

**22/5/3 (Item 3 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

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012288049

WPI Acc No: 1999-094155/199908

XRAM Acc No: C99-027538

XRPX Acc No: N99-068443

**Plant growth substrates in tablet form which swell on addition of water - comprise coconut peat obtained from coconut husk fibres, useful for growing e.g. seedlings, cuttings and bulbs**

Patent Assignee: SPANEX SPANCIRKEL (SPAN-N)

Inventor: CIRKEL L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
NL 1005417	C6	19980907	NL 971005417	A	19970303	199908 B

Priority Applications (No Type Date): NL 971005417 A 19970303

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
NL 1005417	C6	5	A01G-009/10	

Abstract (Basic): NL 1005417 C

Coconut tablets comprising wholly natural organic material useful as growth substrates for plants, give optimum cultivation results due to their excellent air and water holding capacity. A processing step is used to ensure that the tablets are easy to handle. The dry tablets comprise coconut peat, a fibrous material obtained from the coconut husks. Typically a tablet is placed inside a plant pot and then water is added to make it swell to around six times its original size.

USE - The tablets can be used for growing seedlings, cuttings, plants, bulbs, cut flowers, fruit and vegetables and are suitable for use in the home or garden.

ADVANTAGE - Only naturally occurring and renewable raw materials are used which do not require energy intensive processing to form the end product. The tablets also take up little space during transport.

Dwg.0/3

Title Terms: PLANT; GROWTH; SUBSTRATE; TABLET; FORM; SWELLING; ADD; WATER; COMPRISE; COCONUT; PEAT; OBTAIN; COCONUT; HUSK; FIBRE; USEFUL; GROW; SEEDLING; CUT; BULB

Derwent Class: C04; P13

International Patent Class (Main): A01G-009/10

International Patent Class (Additional): C05F-011/02

File Segment: CPI; EngPI

**22/5/4 (Item 4 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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009757157 \*\*Image available\*\*

WPI Acc No: 1994-037008/199405

XRAM Acc No: C94-016958

XRPX Acc No: N94-028778

**Coconut mesocarp as plant culture substrate - is cut into slices and fragmented to form particles comprising fibres with attached parenchymous tissue**

Patent Assignee: SOC CREATION & D'OBTENTION VEGETALE (CREA-N)

Inventor: CHAINTRON J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2692833	A1	19931231	FR 928050	A	19920630	199405 B

Priority Applications (No Type Date): FR 928050 A 19920630

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
FR 2692833	A1	19	B27L-011/08		

Abstract (Basic): FR 2692833 A

A prod. from the mesocarp of coconut comprises fragments (54,56) of a chosen size, each contg. several strands of mesocarp fibre (40), of determined length and orientation, to which particles of parenchymous tissue (46) attached. The product is obtained by cutting the mesocarp into slices of a chosen thickness and fragmenting into pieces of the desired particle size. The fragments are a homogenous composition of fibre and parenchymous tissue, with the fibres arranged parallel to one another in each fragment. The fibre length is 1-30 mm. The fragments may be the same or of different size. In use, the particles are arranged to form permanent air gaps within the mass, of controlled dimensions. Fragments can be compressed for storage and transport.

USE/ADVANTAGE - The substrate is used for plant cultivation partic. in containers, plant pots, either alone or mixed with other components. (claimed). Renewable environmentally friendly replacement for peat or

inorganic substrates. Lack of fine powder in substrate avoids blocking of gps in structure.

Mesocarp is scraped and washed prior to cutting. The slices are cut transversely, pref. perpendicular to the fibres. Slices or fragments are leached. Fragments are sterilised either by heat or by UV or gamma radiation and packaged for storage.

Dwg.3/4

Title Terms: COCONUT; PLANT; CULTURE; SUBSTRATE; CUT; SLICE; FRAGMENT; FORM ; PARTICLE; COMPRISE; FIBRE; ATTACH; TISSUE

Derwent Class: C04; P13; P63

International Patent Class (Main): B27L-011/08

International Patent Class (Additional): A01G-009/10; A01G-031/00;

A23N-005/08; C05F-011/02

File Segment: CPI; EngPI

22/5/5 (Item 5 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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009246762 \*\*Image available\*\*

WPI Acc No: 1992-374179/199246

XRPX Acc No: N92-285187

**Mat for growing plants or cuttings - comprises alternate layers of natural fibre web and plant substrate sewn together**

Patent Assignee: BLUMENERDENWERK STENDER GMBH & CO KG (BLUM-N);

MST-DRAENBEDARF GMBH (MSTD-N); BLUMENERDENWERK STENDER (BLUM-N); BLUMEN STENDER (BLUM-N)

Inventor: HENGSTERMANN H; MEYER A; STENDER H; STOEVER H; HENGSTERMANN H G

Number of Countries: 013 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 4114294	A	19921105	DE 4114294	A	19910502	199246 B
EP 512272	A1	19921111	EP 92106047	A	19920408	199246
US 5309673	A	19940510	US 92877648	A	19920501	199418
EP 512272	B1	19950809	EP 92106047	A	19920408	199536
DE 59203170	G	19950914	DE 503170	A	19920408	199542
			EP 92106047	A	19920408	

Priority Applications (No Type Date): DE 4114294 A 19910502

Cited Patents: AT 332674; AT 359762; DE 3400696; DE 8911056; FR 2584891; US 3172234; JP 5542955

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 4114294	A		5	A01G-009/10	
EP 512272	A1	G	7	A01G-009/10	
Designated States (Regional): AT BE CH DE DK ES FR GB IT LI NL SE					
US 5309673	A		7	A01G-009/00	
EP 512272	B1	G	7	A01G-009/10	
Designated States (Regional): AT BE CH DE DK ES FR GB IT LI NL SE					
DE 59203170	G			A01G-009/10	Based on patent EP 512272

Abstract (Basic): DE 4114294 A

The plant mat is for growing plants, cuttings or seeds, particularly on garden tables, window boxes or balconies. Layers of natural fibre web (1) and plant substrate (2) are laid alternately over each other and sewn together by back stitched seams (4).

There may be three layers, comprising top and bottom of fibre web enclosing a plant substrate, or several layers with the top and bottom layers of fibre web. The fibre may be coconut.

USE/ADVANTAGE - Plant growing mat can be used anywhere, can be completely decomposed and contains all necessary nutrients.

Dwg.1/6

Title Terms: MAT; GROW; PLANT; CUT; COMPRISE; ALTERNATE; LAYER; NATURAL;  
FIBRE; WEB; PLANT; SUBSTRATE; SEW  
Derwent Class: P13  
International Patent Class (Main): A01G-009/10  
File Segment: EngPI

22/5/6 (Item 6 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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007796341  
WPI Acc No: 1989-061453/198909  
XRAM Acc No: C89-027208  
**Epiphytal plant substrate prodn. - from coconut mesocarp inter  
fibre by sieving and drying in moulds, with addn. of coconut fibre and  
PVA adhesive**  
Patent Assignee: FERREIRA A B G (FERR-I)  
Inventor: FERREIRA A B G  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
BR 8703564 A 19890124 BR 873564 A 19870625 198909 B

Priority Applications (No Type Date): BR 873564 A 19870625

Abstract (Basic): BR 8703564 A  
The substrate is made by sieving the mesocarp of cocos nuscifera to  
a suitable particle size and aggregating in suitable metal moulds for  
frying in an oven. Small coconut fibres may opt. be added to improve  
flex resistance, and a small amount of PVA adhesive to improve the  
hydrophilic condition.  
Title Terms: PLANT; SUBSTRATE; PRODUCE; COCONUT; INTER; FIBRE; SIEVE; DRY;  
MOULD; ADD; COCONUT; FIBRE; PVA; ADHESIVE  
Index Terms/Additional Words: POLYVINYL; ALCOHOL  
Derwent Class: A97; C03; P13  
International Patent Class (Additional): A01G-009/10  
File Segment: CPI; EngPI

22/5/7 (Item 7 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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004398150  
WPI Acc No: 1985-225028/198537  
XRPX Acc No: N85-168993  
**System for converting plant aerial roots into feeding roots - involves  
supplying plants with hollow supports containing organic substrate ,  
esp. for vanilla plants**  
Patent Assignee: GARNIER E (GARN-I)  
Inventor: GARNIER E  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
FR 2558683 A 19850802 FR 843328 A 19840130 198537 B

Priority Applications (No Type Date): FR 843328 A 19840130  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
FR 2558683 A 4

Abstract (Basic): FR 2558683 A

The system for converting the maximum number of aerial roots on vanilla plants into ground roots consists of allowing the aerial roots to come into contact with supports made from an organic material.

The support can be made from an iron rod with coconut halves threaded on it, or from a cylinder, containing an organic substrate. When the vanilla plants are grown in a location with coral sand which has a high pH level, the soil in which the plants are set and the substrate can be screened by plastics film.

ADVANTAGE - Improved conditions for intensive cultivation.

0/0

Title Terms: SYSTEM; CONVERT; PLANT; AERIAL; ROOT; FEED; ROOT; SUPPLY;  
PLANT; HOLLOW; SUPPORT; CONTAIN; ORGANIC; SUBSTRATE; VANILLA; PLANT

Derwent Class: P13

International Patent Class (Additional): A01G-007/06; A01G-017/04;

A01G-029/00

File Segment: EngPI

26/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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010034826 \*\*Image available\*\*  
WPI Acc No: 1994-302539/199437  
XRPX Acc No: N94-237816

Plant pot with insert for water irrigation - has bottom portion of pot shaped to prevent roots growing in substrate below flood level of water

Patent Assignee: VAN DER KNAAP N G H (VKNA-I); VAN DER KNAAP N G H M (VKNA-I)

Inventor: VAN DER KNAAP N G H; VAN DER KNAAP N G H M

Number of Countries: 049 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9419928	A1	19940915	WO 94NL55	A	19940303	199437 B
NL 9300413	A	19941003	NL 93413	A	19930308	199438
NL 9300467	A	19941003	NL 93467	A	19930316	199438
AU 9462219	A	19940926	AU 9462219	A	19940303	199503

Priority Applications (No Type Date): NL 93413 A 19930308

Cited Patents: AU 7835783; DE 1932110; DE 3440616; US 3949524

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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WO 9419928	A1	E 17	A01G-027/00	
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Designated States (National): AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KP KR KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SI SK UA US UZ VN

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE

AU 9462219	A	A01G-027/00	Based on patent WO 9419928
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NL 9300413	A	A01G-009/02	
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NL 9300467	A	A01G-009/02	
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Abstract (Basic): WO 9419928 A

The lower part of the pot plant is shaped and provided with holes (4,6) below a height (h) which corresponds to a maximum irrigation level of a water irrigation system after the pot is placed on a floor. The holes allow air and water to pass between the pot interior (1) and the surrounding exterior space.

The bottom of the pot interior has an upper part (13) above the maximum irrigation level, and a partition (14) which holds back the substrate material extends between the upper part and the lower base (12) insert.

USE/ADVANTAGE - Plant pot adapted for irrigation system. As no roots are in substrate below level of water, flood level can be maintained for longer so substrate can absorb water, without root damage. Lessens risk of root contamination and spread of nematodes.

Dwg.3/8

Title Terms: PLANT; POT; INSERT; WATER; IRRIGATE; BOTTOM; PORTION; POT; SHAPE; PREVENT; ROOT; GROW; SUBSTRATE; BELOW; FLOOD; LEVEL; WATER

Derwent Class: P13

International Patent Class (Main): A01G-009/02; A01G-027/00

File Segment: EngPI

29/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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002518524

WPI Acc No: 1980-36552C/198021

**Reconstituted peat products - esp. for prodn. of planting blocks for seedlings**

Patent Assignee: PELTON N R (PELT-I)

Inventor: PELTON N R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CA 1076806	A	19800506				198021 B

Priority Applications (No Type Date): CA 239593 A 19751113

Abstract (Basic): CA 1076806 A

Claimed product comprises peat reconstituted by extruding and cutting to produce a cohesive, mouldable mass which has a smooth texture and a S.G. slightly >1.

The product is produced by (a) removing large contaminants (esp. sticks of dia. >1/4 inch) from moss peat, (b) extruding through a perforated die, (c) cutting with a rotating blade as the peat emerges from the die, and (d) simultaneously cutting and extruding the product by means of a blade in contact with a perforated die/so that it is cut as it enters the die). Steps (b)-(d) can be effected in a screw extruder with 2 adjacent dies sepd. by a rotating blade.

The product is esp. useful for prodn. of peat blocks for use as containers for (esp. tree) seedlings.

Title Terms: RECONSTITUTED; PEAT; PRODUCT; PRODUCE; PLANT; BLOCK; SEEDLING

Derwent Class: C03

International Patent Class (Additional): C05F-011/00

File Segment: CPI



File 9:Business & Industry(R) Jul/1994-2002/Jan 08  
(c) 2002 Resp. DB Svcs.  
File 16:Gale Group PROMT(R) 1990-2002/Jan 09  
(c) 2002 The Gale Group  
File 18:Gale Group F&S Index(R) 1988-2002/Jan 09  
(c) 2002 The Gale Group  
File 20:Dialog Global Reporter 1997-2002/Jan 10  
(c) 2002 The Dialog Corp.  
File 148:Gale Group Trade & Industry DB 1976-2002/Jan 09  
(c)2002 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 285:BioBusiness(R) 1985-1998/Aug W1  
(c) 1998 BIOSIS  
File 481:DELPHEES Eur Bus 95-2002/Dec W4  
(c) 2002 ACFCI & Chambre CommInd Paris  
File 583:Gale Group Globalbase(TM) 1986-2002/Jan 09  
(c) 2002 The Gale Group  
File 621:Gale Group New Prod.Annou.(R) 1985-2002/Jan 09  
(c) 2002 The Gale Group  
File 635:Business Dateline(R) 1985-2002/Jan 08  
(c) 2002 ProQuest Info&Learning  
File 636:Gale Group Newsletter DB(TM) 1987-2002/Jan 09  
(c) 2002 The Gale Group

Set	Items	Description
S1	5	THERMAL(3N) SENSITIVE?(3N) (FIBER? OR FIBRE?)
S2	0	FIBRE(3N) NETH OR (FIBRE OR FIBRE) () NETH() BLOCK OR FIBRE-NETH
S3	0	HOLLAND() (POTGROUND OR POTGROND) OR POTGRONDVERWERKING OR - (EURO()) SUBSTRATES)
S4	758	(PLANT OR PLANTS) (5N) SUBSTRATE?
S5	5	TREE(3N) SEEDLING?(3N) (PLUG OR PLUGS) OR SEEDLING() (PLUG OR PLUGS)
S6	48214	COCONUT?
S7	40347	SYNTHETIC(3N) (FIBRE? OR FIBER?)
S8	2494	COLD() WATER AND (HOT OR WARM) () WATER
S9	2	S1 AND (PLANT OR PLANTS OR TREE OR SEED OR SEEDLING OR FLOWER?)
S10	1	RD (unique items)
S11	0	S4 AND S5
S12	0	S5 AND S6
S13	3	S4 AND S6
S14	2	RD (unique items)
S15	2	S14 NOT S10
S16	48	S6 AND S7
S17	0	S16 AND S8
S18	0	S16 AND S4
S19	4	RD S5 (unique items)
S20	4	S19 NOT (S10 OR S14)
S21	0	CO="VAN DER KNAPP GROEP"
S22	0	CO="FIBRE NETH"
S23	0	CO="FIBRE-NETH"

10/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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06243949 Supplier Number: 54528011 (USE FORMAT 7 FOR FULLTEXT)  
**Dealing with the reclassification of Refractory Ceramic Fibres.(as class 2  
carcinogens)**  
Metallurgia, v66, n3, p23(1)  
March, 1999  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 2277

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

The reclassification of refractory ceramic **fibres** remains a **sensitive** issue for the **thermal** process industries. The metals industry is one of the major users of RCFs -- and, for...  
... or a combination of both, which can be applied to existing as well as new **plant** . The following options are alternative and proven methods which effectively minimise the risks associated with...

...requiring only minor maintenance. The system can be incorporated into the design of a new **plant** or retrofitted onto existing furnaces & kilns.

\* Other alternatives

A part from replacing or encapsulating ceramic...many applications where no immediate action is necessary other than to identify those items of **plant** in which RCFs are installed. This is essential to enable the correct procedures to be...

15/3,K/1 (Item 1 from file: 148)  
DIALOG(R) File 148:Gale Group Trade & Industry DB  
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09061330 SUPPLIER NUMBER: 18812569 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Calgene Receives U.S. Patent for Controlling Structured Triglycerides**

PR Newswire, p1030SFW031

Oct 30, 1996

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 567 LINE COUNT: 00052

... 563,058 covers medium chain lysophosphatidic acid acyl transferases (LPAAT) which prefer laurate fatty acid **substrates** .

**Plant** oils are comprised of triglycerides, which are molecules consisting of three fatty acids attached to...

...key raw material used in the manufacture of soap, detergent, oleochemical and personal care products. **Coconut** and palm kernel oils, imported primarily from southeast Asia, are the only current sources of...

15/7/2 (Item 1 from file: 636)  
DIALOG(R) File 636:Gale Group Newsletter DB(TM)  
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04830526 Supplier Number: 64773122 (THIS IS THE FULLTEXT)

**Growers Opting for Soilless Substrates.**

Ozone Depletion Network Online Today, pNA

March 2, 2000

**TEXT:**

Robert Ilsink, a rose grower in Zimbabwe, said he grows his roses in a substrate consisting of **coconut** fibers instead of soil, in order to avoid having to use methyl bromide. Soilless media, which also includes rockwool and perlite, are being used more and more by growers in Holland, and Ilsink's family-owned business Cherry Woods' New Roses, Ltd. is following suit.

It is the most common thing in Holland," said Ilsink. "No one wants to use methyl bromide." Ilsink's company is one of the first in Zimbabwe to begin using a **coconut** fiber substrate. The fiber, processed into a substrate known as cocospeat, is free of common soil-borne pathogens because **coconuts** grow above ground, according to supplier company Dutch Plantin. Disease caused by fungus can be avoided providing the **plant** being grown in the **substrate** is free of disease.

Growing is done in bags or pots. Since there are no soilborne diseases present, growers can avoid having to use methyl bromide to fumigate.

Ilsink's decision to use cocospeat is at least partially business-oriented, since much of his product is destined for the European market. A number of supermarket chains --potential clients-- will only buy flowers cultivated in an environmentally sustainable manner. Ilsink is using the chemical pesticide ethylene dibromide to help his transition away from methyl bromide. Contact: Dutch Plantin, e-mail [info@dutchplantin.com](mailto:info@dutchplantin.com); MPS (for information about European environmental quality ratings), website <http://www.st-mps.nl>.

(RUMBA NEWSLETTER: FEBRUARY 2000)

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20/7/1 (Item 1 from file: 148)  
DIALOG(R) File 148:Gale Group Trade & Industry DB  
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03717699 SUPPLIER NUMBER: 07217791 (THIS IS THE FULL TEXT)  
**Kirin invests in U.S. Biotech firm. (Kirin Brewery Co., Twyford International Inc.)**  
Japan Economic Newswire, K881219053  
Dec 19, 1988

TEXT:

KIRIN INVESTS IN U.S. BIOTECH FIRM+  
TOKYO, DEC. 19 KYODO  
KIRIN BREWERY CO. MONDAY ANNOUNCED AN INVESTMENT IN A U.S. TISSUE CULTURE PLANT PRODUCTION, RESEARCH AND MARKETING FIRM.  
KIRIN OFFICIALS SAID THE COMPANY HAS ACQUIRED ABOUT 30 PERCENT STOCK OWNERSHIP IN TWYFORD INTERNATIONAL INC. (TII) FROM THE SANTA PAULA, CALIFORNIA-BASED BIOTECH FIRM FOR 6.2 MILLION DOLLARS. A CAPITAL PARTICIPATION AGREEMENT WAS SIGNED LAST THURSDAY (U.S. TIME) WITH TII.  
THE OFFICIALS SAID KIRIN IS NOW TII'S TOP SHAREHOLDER, AND WILL SEND ONE DIRECTOR TO ITS BOARD OF DIRECTORS.  
TII, IN TURN, HAS ACQUIRED FLORIDA-BASED HARTMAN'S PLANTS LABORATORIES INC., ONE OF LEADING U.S. TISSUE CULTURE PLANT FIRMS.  
THE OFFICIALS SAID TII HAS STARTED A " **SEEDLING PLUG** " PROGRAM WHICH WOULD MAKE IT THE WORLD'S LARGEST TISSUE CULTURE PLANT FIRIM WITH A 25 PERCENT SHARE OF THE WORLD MARKET. KIRIN WILL COOPRATE WITH TII ON THE PROJECT.  
KIRIN AND TII WILL SHARE LICENSES FOR TISSUE CULTURE TECHNOLOGY AND PLANTS AS WELL AS CONCLUDE A MUTUAL MARKETING AGREEMENT.  
KIRIN HAS A BIOTECH FARM IN YAMANASHI PREFECTURE, CENTRAL JAPAN, CAPABLE OF PRODUCING 500,000 CULTURE TISSUE PLANTS A YEAR.  
TISSUE CULTURE IS A METHOD OF REMOVING SMALL FRAGMENTS OF TISSUE FROM PLANTS AND GROWING THEM IN A CULTURE MEDIUM OUTSIDE PARENT ORGANISM. THE METHOD IS USED IN CULTURING FOLIAGE AND FLOWERING PLANTS.  
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20/7/2 (Item 1 from file: 285)  
DIALOG(R) File 285:BioBusiness(R)  
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00854121

**Copper-treated plug flats influence root growth and flowering of bedding plants.**

Armitage A M; Gross P M  
Dep. Hortic., Univ. Ga., Athens, GA 30602, USA.  
Hortscience Vol.31, No.6, p.941-943, 1996.

ABSTRACT: A copper hydroxide formulation (0%, 3.5%, 7%, 11% Cu) was applied to plug trays before sowing seeds of Impatiens times hybrida L. 'Accent Red', Pelargonium times hortorum Bailey 'Scarlet Elite', and Petunia times hybrida Hort. Vilm.-Andr. 'Ultra White' to investigate the influence of the formulations on ease of transplant, root growth, and shoot growth. These factors also were investigated in Cu-treated **seedling plugs** held past optimal transplanting stage. Root spiraling and seedling height at transplant were reduced for all taxa grown in Cu-treated trays, regardless of concentration, compared to seedlings from nontreated trays. Root weight and shoot weight responses to Cu treatments at transplant and at flowering varied among taxa. Mature heights of all taxa were unaffected by Cu treatment; however, flowering date was delayed for impatiens and geraniums transplanted at optimal time from Cu-treated trays. In general, petunias displayed little response to Cu treatment. Root spiraling was reduced and plugs were removed more easily from Cu-treated than from

control trays stored for 2 weeks in the greenhouse, but flowering time was delayed for 12 days for impatiens and petunias and 21 days for geraniums, regardless of Cu concentration.

20/7/3 (Item 2 from file: 285)  
DIALOG(R) File 285:BioBusiness(R)  
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00838689

**Effects of short-term water stress, hydrophilic polymer amendment, and antitranspirant on stomatal status, transpiration, water loss, and growth in 'Better Boy' tomato plants.**

Gu S; Fuchigami L H; Guak S H; Shin C  
Dep. Fruit Sci., Southwest Missouri State Univ., Res. Campus, Mountain Grove, MO 65711, USA.  
Journal of the American Society for Horticultural Science Vol.121, No.5, p.831-837, 1996.

**ABSTRACT:** Seedling plugs of 'Better Boy' tomato plants (*Lycopersicon esculentum* Mill.) were potted in 60% processed fiber: 40% perlite (by volume) media amended or nonamended with either crystalline or powdered hydrophilic polymer (2.4 kg cntdot m-3), and treated with one of several concentrations (0%, 2.5%, 5%, 7.5%, and 10%) of antitranspirant GLK-8924, at the four true-leaf stage. Plants were either well-irrigated or subjected to short-term water stress, withholding water for 3 days, after antitranspirant GLK-8924 application. Leaf stomatal conductance, transpiration rate, whole-plant transpirational water loss, and growth were depressed by short-term water stress and antitranspirant GLK-8924. In contrast, hydrophilic polymer amendment increased plant growth, resulting in higher transpirational water loss. The depression of stomatal conductance and transpiration rate by short-term water stress was reversed completely in 2 days after rewatering while the reduction of plant growth rate diminished immediately. The effects of antitranspirant GLK-8924 were nearly proportional to its concentration and lasted 8 days on stomatal conductance and transpiration rate, 4 days on plant growth rate, and throughout the experimental period on plant height and transpirational water loss. Plant growth was reduced by antitranspirant GLK-8924 possibly by closing leaf stomata. In contrast, hydrophilic polymer amendment resulted in larger plants by factors other than influences attributed to stomatal status. Hydrophilic polymer amendment did not interact with antitranspirant GLK-8924 on all variables measured. The application of antitranspirant GLK-8924 was demonstrated to be useful for regulating plant water status, plant growth, and protecting plants from short-term water stress.

20/7/4 (Item 1 from file: 635)  
DIALOG(R) File 635:Business Dateline(R)  
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0329939 92-80210

**Home Is Where the Greenhouse Business Grows**

Friel, John  
Intelligencer Journal (Lancaster, PA, US) sBUS p--  
PUBL DATE: 920907  
WORD COUNT: 744  
DATELINE: Lititz, PA, US

TEXT:

Old-timers say that in horticulture, hard times are good times --that's when people stay home and plant gardens.

There must be some truth to the adage to judge by D&L Grower Supplies Lititz-based wholesaler to the greenhouse and nursery business. D&L, a growing business in a growing industry, is moving its operation to a vacant warehouse at 33 Hess Road, Leola, just south of Route 23.

"You can't miss it," says owner and President Richard L. Berry. "It's the ugly blue one."

The warehouse might be ugly --it was last used several years ago by the Johns Manville company as an insulation storage and distribution center--but at 39,000 square feet, its size makes it beautiful in Berry's eyes.

Berry says he's moving the company because "we're bulging at the seams" at its current home along Route 322. D&L's 23 employees serve customers in Pennsylvania, Delaware and Maryland. Berry expects to add a couple of new clerical positions in the new location.

If you're in the greenhouse, nursery or landscape business, or want to be, D&L's 285-page catalog has whatever you need, Berry says--everything from A-Rest growth regulator to Zyban fungicide. D&L sells greenhouses and all the supplies and equipment that make them work--heaters, benches, irrigation equipment and, of course, plants. And D&L's salespeople can sell what you grow, too, from **seedling** " **plugs** " to geranium and poinsettia cuttings, starter plants to pre-finished crops.

One of D&L's newest and most intriguing product lines is called "biological pest controls." Widespread concern about the overuse of chemicals and government regulation of their use has led to the current movement toward Integrated Pest Management, which is designed to control pest populations and keep them below an 'economic damage' level. The use of insecticides should be a last resort," the catalog states.

Berry says the IPM imperative is "picking up some; we're seeing a slight increase each year, but the industry has not fully embraced it."

Some of IPM's reduced-impact tools include insecticidal soaps and beneficial insects.

From D&L's shelves, professional growers can select ladybugs by the quart or gallon, in traditional orange or basic black, to combat destructive aphids and mealybugs; microscopic nematodes that are "watered in" like fertilizer to attack and kill burrowing pest insects; and praying mantises, which will eat nearly anything that moves, including one another. The bugs are a hard sell, Berry said. "Psychologically, (growers) have a problem introducing insects into the greenhouse."

Berry learned the greenhouse supply business working for George K. Groff Inc. of Bird-In-Hand. He left 12 years ago to start D&L in partnership with Lamar Esbenshade (D&L stands for "Dick & Lamar"). The two men set up shop on land leased from Esbenshade's greenhouse company along Route 322, north of Lititz. Berry bought out Esbenshade's share of the business in 1984.

Of all the elements of his customer base--greenhouses, nurseries, landscapers and garden centers--he says greenhouse growers have generally fared the best in recent uncertain times although "some landscapers had a very good fall' and spring."

D&L may be strictly wholesale, but like any good wholesaler, Berry is keenly aware that all cash flow starts at the retail level. So he keeps a finger on the pulse of the retail market.

"When housing is down, so is landscaping," he said. Nurseries, too, have felt the pinch of the building slowdown. By contrast, greenhouse products tend to be more "impulse purchases--you don't necessarily go into a store to buy a plant, but if it's there, people will spend a few dollars." And with chain stores and supermarkets carrying hanging baskets and bedding plants, he thinks the product is more readily accessible to the consumer than ever before.

Berry doesn't discuss his company's annual revenue but says D&L's current fiscal year is "our best year ever" in sales of greenhouse structures, heaters and ventilating equipment.

What does Berry think about his industry's "recession-proof" reputation?

"I used to believe that," he says, until the last year and a half when he saw companies begin to eliminate management jobs. Previous layoffs had mainly affected labor, he says.

Berry made settlement on the Hess Road property in July and hopes to have "the whole scenario" moved in by November.

Renovations will include new office space, chemical storage facilities and a new cream or beige paint job outside, so he won't have to tell customers to look for "the ugly blue one."

Total cost of the move and renovation is expected to be about \$1 million.

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